

RURAL EDUCATION.

THE MACDONALD EXPERIMENT IN CANADA.

(FROM A CORRESPONDENT.)

In order to initiate a wide-spread reform in the rural schools of Canada, Sir William Macdonald, of Montreal, the munificent benefactor of McGill University, is founding, and temporarily maintaining, five model schools, one in each of the Eastern Provinces. He hopes in this way to show what can and should be done. Three of these schools are already in operation in Nova Scotia, New Brunswick, and Ontario, and a fourth in Prince Edward Island will be opened in May next. Middleton School in Nova Scotia, opened in August, 1902, and Kingston School in New Brunswick, opened in August, 1903, have already been working long enough to be profitably studied. Having had the opportunity of studying some of the problems of rural education during a recent visit to Canada and the United States, I propose to illustrate Sir William Macdonald's scheme of reform by a description of the origin and present condition of these two schools.

In considering the rural school problem in Canada, two facts must be borne in mind which differentiate it from the problem in England. In the first place, population is far more widely scattered, and over large areas schools must be provided where there are not even hamlets, but merely isolated farms; secondly, the peasant class is non-existent, and thus the children who attend the rural schools are the children of land-owning farmers, with a sprinkling of those of store-keepers and of small professional men. The result of the first is that the ordinary rural school is exceedingly small, sometimes consisting of five to ten children. The result of the second is that no scheme of reform will appeal to the rural population which does not place the country child on an equality with the city child by carrying him on from the ordinary elementary grades through a secondary "high-school" course, and fit him, if he wishes, to go on to college. To meet these conditions the consolidation of the small district schools is not merely desirable, but absolutely essential. In instituting his reform, however, what Sir William Macdonald has mainly at heart is the differentiation of the country school course from that of the cities, in order that the bulk of the rural population may grow up to love and prefer country life and pursuits. From his point of view the introduction of nature-study and manual training as central features of the curriculum is the most important side of rural school reform.

The Middleton and Kingston Schools are good examples of the two different types of rural school locality with which reformers must deal. Middleton School is in a village of 800 inhabitants, in the centre of a fertile and prosperous valley, and draws its pupils both from the village and from a radius of about four miles round; Kingston School stands merely at four cross roads, with only a church and half a dozen houses in sight; it draws its children from a radius of five miles and from a region where no village exists. The village of Middleton has three doctors, two solicitors, two banks, several fair-sized shops, and a railway station with two trains a day; it is the collecting point for the agricultural produce of the surrounding valley, a rich fruit-growing district; yet it has isolated wooden houses, roads comparable only to ploughed fields, and even in the very centre of the village only an occasional plank for a side-walk. Kingston, though in the midst of the most beautiful scenery of New Brunswick, nestling among hills and forests of fir, beech, and maple, and close to the many-armed waterway of the River St. John, is an unprogressive farming district. The soil is poor, the railway five miles away, the roads atrocious. The people, descendants of the earliest Loyalists who settled in New Brunswick from the States in the Revolutionary War, though of sterling quality, are unprogressive and relatively poor. Middleton, therefore, affords an example of consolidation round a village, Kingston of consolidation round a point chosen for convenience

apparatus for each pupil, demonstration boards, and all other requisites.

Of the four acres of ground, 1½ is used for school gardens and the rest for a baseball ground. Attached to the school is the stable for 11 vases and 22 horses.

The Kingston school has a large wooden building of similar size and plan. It stands in two acres of ground, part of which is being laid out very profitably with turf and young trees; there is a baseball ground for boys and a croquet lawn for girls, and half an acre will be used next spring for school children's gardens. The rooms for manual training and domestic science and the science laboratory are in this case within the main building. There is also a small room which is to be a library, where the daily paper is already to be seen, and another large room which is to become a school museum and be filled by the pupils. Already one term's work shows quite a collection of nature specimens from the neighbourhood.

All the children except those from the immediate district ride daily to and from these schools in covered vans, owned by Sir William Macdonald, and driven by paid drivers who supply their own horses. Each van holds from 20 to 24 children. The routes vary in length from six to 2½ miles; the children who come furthest start at 7.30 a.m. The vans reach school by 9.15 and leave again at 3.30 p.m. School begins at 9.30, and the teaching day is four hours and 40 minutes; there is one hour for lunch at noon and two shorter breaks.

The main aim of the school work is to prepare children for country life, both intellectually and physically, by giving to nature-study, manual training, and school gardening a central place in the curriculum, and by connecting the other subjects with these as far as possible. It is felt, however, to be impossible and undesirable at once to break fully with the established curriculum, and the relation of the various subjects to each other is only gradually being worked out. A great deal of liberty is being given to each teacher to plan his or her own time-table, but in the main the school law of the province has to be reckoned with. An average of about 2½ hours a week is given to manual training, or, in the case of older girls, to domestic science, and 1½ hour to nature-study; but the time-table, especially in the lower grades, is elastic. In the spring and summer additional time is given for gardening and for expeditions into the country round. At Middleton last year the children in Grades I. to III. gardened in common, but each child from Grades V. to X. had his own garden, 12ft. by 8ft., where he planted and grew vegetables under supervision. These were his own property to sell or otherwise dispose of. There was also an experimental plot where the effects of different fertilizers and other things were tested and where hotbeds were made and watched. The latter had the effect of inducing some at home to construct hotbeds for the first time.

Manual training begins in the lower grades with drawing, brush-work, cardboard work, or sewing; both boys and girls learn the latter at Middleton and were able to hem dusters for Christmas presents. The older boys from grades V. or VI. upwards learn American Sloyd, and the girls take laundry work or cooking. They have one long lesson of two and a-half hours per week. Each boy has to first calculate and make a mechanical drawing of the model he is to construct, thus mathematics are brought in. The models made are of things useful in country life, as plant labels, plant stands, match lighters, and so on. The connexion with nature study is maintained by lessons on the quality and origin of the woods used. The girls study not only the art of cooking, but a little of the chemistry of foods, and wherever possible the necessary household accounts are done by the class. One year is given to laundry work.

Nature study is wisely begun in a very informal way in the lower grades. A short talk of about ten minutes opens each morning's work; the weather for the day is discussed and registered conspicuously in a chart; any specimens brought by the children to school are shown, and the children are encouraged to speak of anything which they have seen on the way to school. But the nature study idus runs through all the work of the little people. They read, write, sing, and do their sums about the things they see in nature.

of transport, the one in a progressive, the other in a non-progressive region.

These two localities were carefully selected by Professor J. W. Robertson, as adviser and agent of Sir William Macdonald, and the offer was made to them in 1902 that all expenses should be paid for three years out of the Macdonald Fund, over and above the recent average expenses, provided the schools would consolidate and allow Professor Robertson a free hand in appointing the staff and organizing the curriculum. Sir William wished, for the sake of the object lesson, to spare no expense. This offer the districts concerned, after much hesitation, decided to accept, and the schools were accordingly built and opened, the one in 1902, and the other in 1903. The old district school houses are still standing and are being maintained in case the experiment is dropped after three years.

Middleton had already a school of 130 children, with three teachers, whose salaries ranged between £60 and £120 per annum. Around it lay seven other school districts, with schools varying in enrolment between 19 and 47 pupils; each school had one teacher with a salary from £30 to £60 per annum. The total number of children enrolled in the eight schools was 367, and the average daily attendance in 1902 was 198.4, or 54 per cent. The districts had not been marked by educational enthusiasm, for they had paid the relatively low average school-rate of 35 cents on the \$100 of property. The school districts now centralized in Kingston were seven in number; the total number of children in the seven schools was 125, and each was taught by a young woman teacher at a salary which in only one case reached £60. The united average daily attendance for the last year in the seven schools was only 55, about eight in each school, or 44 per cent. of the number enrolled. The children left school very young.

The consolidation of the schools into one central school had immediately a marked effect on enrolment, on attendance, and on the age at which pupils left. In Middleton in the first term the average daily attendance rose from 54 per cent. to 78 per cent., and in Kingston from 44 per cent. to 91 per cent. In Kingston the enrolment rose from 125 to 165, an increase partly accounted for by the ardour of districts not included in the scheme, since 20 pupils from outlying districts were willing either to board in the neighbourhood, walk an immense distance, or otherwise convey themselves in order to attend the new school. Moreover, many older pupils returned to school, and amongst them seven young men and women between 20 and 30 years of age. No clearer evidence of the enthusiasm of the Kingston folk could be furnished than the sight of these grown-up people marching in file with children and seated as pupils in children's desks.

The new schools were staffed with the best teachers that could be obtained, at salaries ranging from £63 to £200 per annum. The Middleton school of 400 pupils has a headmaster, two assistant masters, and eight assistant mistresses. One of these is a specialist in manual work, another in domestic science, and two others have University degrees. The Kingston school of 165 pupils has a headmaster, an assistant master, who is a specialist in manual work, and three assistant mistresses. Three of these are University graduates, and a special domestic science teacher is to be sent out from England in May. The schools, when consolidated, were therefore able to be divided into grades on the lines of the Canadian city schools, in which there are eight ordinary grades and from one to four high-school classes. Kingston has one high-school grade and Middleton has three.

Middleton school has a two-storied brick building, standing on four acres of ground in the centre of the village. It has basement playgrounds, eight large class-rooms holding 50 pupils each, an assembly-hall seating 600 people, a principal's office and teacher's room, and a small room for scientific work. Owing to the fact that many more children joined the school than had been expected, the old school building has been fitted up for cooking and laundry work, woodwork, and chemical laboratory work. The fittings are excellent; in a class of 24 each boy has a separate carpenter's bench and full set of tools, and the kitchen is supplied with separate cupboards and

the fairy-story element in nature is not forgotten. In the higher classes a more systematic form of nature study is gradually introduced, and in the high-school classes elementary physics and chemistry are taken experimentally and their bearings on agriculture illustrated. Thus an important part of the school work of these children is calculated to develop in them interests which lead towards life in the country.

On the other hand, these schools have a difficult problem still to work out. If the more ordinary subjects are also to be taught and the mortal distraction inherent in a wide curriculum is to be avoided, they must be taught in close relation to nature study and manual work. The weakest point of the work of these schools lies here. That these ordinary subjects cannot be entirely dropped, at present at any rate, seems certain; for it is impossible to make a complete educational schism between town and country education. History and literature, moreover, are essential for the training of human sympathy, public spirit, and imagination. Yet these are the subjects most difficult to correlate with manual training and nature study.

Middleton has made a beginning by taking up the study of "Fossilgeline," the historic scenes of which were laid a very few miles away in this same valley. What is needed is history and literature beginning with the neighbourhood and starting from the present, which would give the Canadian farmers wider interests and sympathies and ideals than nature study pure and simple could give.

It is too soon to draw conclusions as to the effect of these schools on the life of the districts. So far it is known that the numbers attending school have increased, that the attendance has been far more regular, that the children take a greater interest in their school and a pride in its doings, that the adults in these scattered districts have been drawn together by new methods, and have found the occasional school entertainments a time of common social intercourse. Of the two districts, Kingston, the most backward and most completely rural, has shown the greatest appreciation of the new school. In the matter of expense, the experiment is by no means normal, but it is evident, first, that it cannot be hoped to reform rural schools and economize at the same time; second, that a district which is so large and where routes are so long that the men engaged in driving vans cannot get back to work in the interval is economically a mistake; a radius of two and a-half miles is probably the largest that should be adopted. But for experience in the most economical way of consolidating scattered rural schools one must turn to Ohio and to Massachusetts for evidence.

One more conclusion is forced home by the study of these schools, and that is the necessity of specially training teachers for the work. It takes an unusual and very gifted teacher to stop aside from the beaten track with any effectiveness, and educational policy cannot afford to rely on a supply of unusual and gifted teachers. The average teacher must be trained for his special work.

THE CREWE RAILWAY ACCIDENT.—Lieutenant-Colonel Von Donop, R.E., reporting to the Board of Trade as to the collision near Crewe Station, on the London and North-Western Railway, on December 20, between a passenger train and a train of empty coaches, fortunately without any personal injury, says the driver of the passenger train, which was from Manchester, admitted that he was responsible for the accident. He acknowledged that both signals referring to the up loop-line on which he was running were at danger when he passed them, and that the collision was entirely due to the momentary mistake which he made of thinking that he was running on the main line. This mistake on the man's part, says Lieutenant-Colonel Von Donop, appeared to have been the sole cause of the accident. All the company's regulations about the admission of up trains into Crewe Station appear to have been strictly adhered to, and no responsibility attaches to any other servant of the company.

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